



**THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Arend et al.  
Application No. : 10/593,930  
Filed : September 21, 2006  
Title : HIGH RESPONSIVITY HIGH BANDWIDTH METAL-  
SEMICONDUCTOR-METAL OPTOELECTRONIC DEVICE  
TC/A.U. : Unassigned  
Examiner : Unassigned  
Conf. No. : Unassigned  
Docket No. : 1038-12 PCT/US  
Dated : December 26, 2006

Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

I hereby certify this correspondence is being deposited with the  
United States Postal Service as first class mail, postpaid in an  
envelope, addressed to: Commissioner for Patents, P.O. Box 1450,  
Alexandria, Virginia 22313-1450 on December 26, 2006.

Signed:

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In order to fulfill the requirements of candor and good faith set forth in 37 C.F.R. §1.56, Applicants submit herewith the following Information Disclosure Statement in accordance with the provisions of 37 C.F.R. §1.97 and §1.98.

The references are listed on Applicants' Form PTO-1449, which is attached to this Information Disclosure Statement for the convenience of the Examiner. Applicants request consideration of each of the documents listed on the attached Form PTO-1449, and that such consideration be indicated by initialing each citation thereon.

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Information Disclosure Statement  
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This Statement is being filed before the mailing of a first Office Action on the merits. Applicants believe that no fee for this submission is due. If, however, a fee is due for entry of this Information Disclosure Statement, the Office is authorized to charge Deposit Account No. 08-2461 for any such fee.

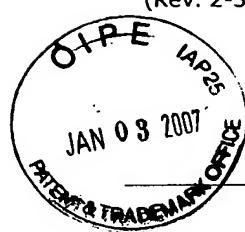
If the Examiner has any questions or comments relating to the present application, he or she is respectfully invited to contact Applicants' attorney at the telephone number set forth below.

Respectfully submitted,

  
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|---|--|------------------------------------|--------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE<br>(Rev. 2-32) PATENT AND TRADEMARK OFFICE      |  | ATTY. DOCKET NO.<br>1038-12 PCT/US | SERIAL NO.<br>10/593,930       |
| INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT<br><br>(Use several sheets if necessary) |  | APPLICANT<br>Arend et al.          | CONFIRMATION NO.<br>Unassigned |
|   |  | FILING DATE<br>September 21, 2006  | GROUP<br>Unassigned            |

## U.S. PATENT PUBLICATIONS

| EXAMINER INITIAL |  | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE |
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## U.S. PATENT DOCUMENTS

| EXAMINER INITIAL |  | DOCUMENT NUMBER | DATE       | NAME            | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE |
|------------------|--|-----------------|------------|-----------------|-------|-----------|----------------------------|
|                  |  | 5,625,729       | 04/29/1997 | Brown           |       |           |                            |
|                  |  | 5,945,720       | 08/31/1999 | Itatani et al.  |       |           |                            |
|                  |  | 5,973,316       | 10/26/1999 | Ebbesen et al.  |       |           |                            |
|                  |  | 6,034,809       | 03/07/2000 | Anemogiannis    |       |           |                            |
|                  |  | 6,122,091       | 09/19/2000 | Russell et al.  |       |           |                            |
|                  |  | 6,236,033 B1    | 05/22/2001 | Ebbesen et al.  |       |           |                            |
|                  |  | 6,282,005 B1    | 08/28/2001 | Thompson et al. |       |           |                            |
|                  |  | 6,285,020 B1    | 09/04/2001 | Kim et al.      |       |           |                            |
|                  |  | 6,441,298 B1    | 08/27/2002 | Thio            |       |           |                            |
|                  |  | 6,614,960 B2    | 09/02/2003 | Berini          |       |           |                            |
|                  |  | 6,713,832 B2    | 03/30/2004 | Pardo et al.    |       |           |                            |
|                  |  |                 |            |                 |       |           |                            |
|                  |  |                 |            |                 |       |           |                            |

EXAMINER

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## FOREIGN PATENT DOCUMENTS

| EXAMINER INITIAL |  | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION |    |
|------------------|--|-----------------|------|---------|-------|-----------|-------------|----|
|                  |  |                 |      |         |       |           | YES         | NO |
|                  |  |                 |      |         |       |           |             |    |
|                  |  |                 |      |         |       |           |             |    |
|                  |  |                 |      |         |       |           |             |    |
|                  |  |                 |      |         |       |           |             |    |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |  |  |
|--|--|--|
|  |  | Degiron et al., "Effects of Hole Depth on Enhanced Light Transmission Through Subwavelength Hole Arrays", <i>Applied Physics Letter</i> , Vol. 81, No. 23 pps. 4327-4329 December 2, 2002. |
|  |  | Ebbesen et al., "Extraordinary Optical Transmission Through Sub-Wavelength Hole Arrays", <i>Nature</i> , Vol. 39, pps. 667-669, February 12, 1998.   |
|  |  | Lochbihler et al., "Highly Conducting Wire Gratings in the Resonance Region", <i>Applied Optics</i> , Vol. 32, No. 19, pps. 3459-3465, July 1, 1993.                                       |
|  |  | Dmitruk et al., "MSM-Photodetectors with Corrugated Metal-Semiconductor Interface Based on III-V Semiconductors", <i>SPIE</i> , Vol. 2999, pps. 384-390, January 2, 1997.                  |
|  |  | Krishnaswami et al., " A Comparative Study of Surface Plasma Enhanced Grating Coupled Detectors", <i>SPIE</i> , Vol. 2999, pps. 391-400, January 2, 1997.                                  |

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